

Remarks:

The above amendments and these remarks are responsive to the final Office action dated November 3, 2006, and are being filed under 37 C.F.R. § 1.114 in support of the accompanying Request for Continued Examination. Claims 1-31 are pending in the application. In the Office action, the Examiner rejected all of the pending claims as being anticipated by U.S. Patent Application Publication No. 2002/0113881 A1 to Funston et al. ("Funston"). Applicant traverses the rejections, contending that the rejected claims are patentable over the cited reference.

Nevertheless, to expedite issuance of a patent, and to more particularly point out and distinctly claim aspects of the invention that applicant would like to patent now, applicant has (1) canceled claim 20, without prejudice, (2) amended independent claims 1, 14, 21, and 30, and (3) amended dependent claims 4, 7-12, 22, 23, and 26-29. However, applicant reserves the right to pursue the canceled claim and any of the amended claims in their original and/or previously amended form at a later time. Furthermore, applicant has presented remarks showing that claims 1-19 and 21-31 are allowable over the cited reference. Accordingly, in view of the foregoing amendments and the following remarks, applicant respectfully requests reconsideration of the rejected claims, and prompt issuance of a Notice of Allowability covering all of the pending claims.

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I. Request for Continued Examination

Applicant is submitting herewith a Request for Continued Examination (RCE) under 37 C.F.R. § 1.114. This Request complies with the requirements of 37 C.F.R. § 1.114. In particular:

- (i) Prosecution in the application is closed, since the last Office action was a final Office action under 37 C.F.R. § 1.113.
- (ii) The Request is accompanied by a submission as set forth at 37 C.F.R. § 1.114(c), specifically, the amendments and remarks set forth herein.
- (iii) The Request is accompanied by the fee set forth at 37 C.F.R. § 1.17(e).

Accordingly, applicant respectfully requests grant of this Request for Continued Examination.

II. Claim Amendments

The present communication amends claims 1, 4, 7-12, 14, 21-23, and 26-30. Each of these claim amendments is fully supported by the application as filed. Exemplary support (or an explanation) for each claim amendment is presented, without limitation, in the following table:

Claim	Exemplary Support or Explanation
1 (Independent)	Page 1, lines 18-27; Page 3, lines 13-17; Claim 11
4	(Addresses formal issue created by amendment of claim 1)
7	(Addresses formal issue created by amendment of claim 1)
8	Page 13, lines 13-17
9	(Corrects typographical error)
10	(Corrects typographical error)
11	Page 4, lines 8-11; Figure 1
12	(Addresses formal issue created by amendment of claim 1)
14 (Independent)	Page 1, lines 18-27; Page 3, lines 13-17; Claim 11

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Claim	Exemplary Support for Explanation
21 (Independent)	Page 1, lines 18-27; Page 3, lines 13-17; Claim 11
22	(Corrects typographical error)
23	(Addresses formal issue created by amendment of claim 21)
26	(Addresses formal issue created by amendment of claim 21)
27	Page 13, lines 13-17
28	(Corrects typographical errors)
29	(Corrects typographical errors)
30 (Independent)	Page 1, lines 18-27; Page 3, lines 13-17; Claim 11

III. Rejections under 35 U.S.C. § 102

The Examiner rejected each of claims 1-31 as being anticipated by Funston. Applicant traverses the rejections. Nevertheless, for the reasons cited above, applicant has amended independent claims 1, 14, 21, and 30 (among other claim amendments). Each of the pending claims is patentable at least for the reasons set forth below.

A. Claims 1-13, and 31

Claim 1, as amended, is directed to a method of adjusting color:

1. (Currently Amended) A method of adjusting color of images displayed in ambient light, comprising:

sensing a signal from a plurality of spectral regions of ambient light to define a sensed signature of the ambient light;

comparing the sensed signature to predetermined signatures of light sources of different types to identify a type of light source that corresponds to the ambient light; and

projecting light to create ~~creating~~ images modified by a predefined color adjustment for the type of light source identified, the predefined color adjustment being configured to reduce a change in color rendition introduced by the type of light source identified as corresponding to the ambient light.

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Funston does not teach or suggest every element of claim 1. For example, Funston does not teach or suggest projecting light to create images modified by a predefined color adjustment "configured to reduce a change in color rendition introduced by the type of light source identified as corresponding to the ambient light."

Funston relates to a camera with a display for displaying verification images of captured images. The camera is disclosed to (1) capture an electronic image, (2) measure ambient light, and (3) display a verification image of the electronic image that is modified to include a perceivable color cast (if appropriate) in the ambient light, based on the ambient light measured. The color cast makes normally white objects appear non-white and thus unnatural. Funston's stated purpose (see Abstract) for modifying the verification image is "to overcome viewer adaptation to the respective scene illuminant" (i.e., to overcome viewer adaptation to ambient light that makes the scene appear properly colored (to have no color cast)). In other words, Funston discloses modification of displayed images to increase a color cast introduced by ambient light, so that the unnaturally appearing color cast is visible to a person viewing the display, despite adaptation to the ambient light. By contrast, the claimed invention recites images modified by a predefined color adjustment configured "to reduce a change in color rendition introduced by the type of light source identified as corresponding to the ambient light." Funston thus discloses modification of images in a fashion counter to that claimed by claim 1.

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It also would not have been obvious to modify Funston to achieve the claimed invention. In particular, Funston teaches away from the claimed invention because Funston states that the human visual system "adapts to illuminants having different color temperatures" (paragraph [0010]), thereby suggesting that no color correction is needed for images displayed in ambient light.

In summary, claim 1 is patentable over Funston. Accordingly, claim 1 should be allowed. Claims 2-13, which depend from claim 1, also should be allowed for at least the same reasons as claim 1.

B. Claims 14-19

Claim 14, as amended, is directed to a system for adjusting color:

14. (Currently Amended) A system for adjusting color of images displayed in ambient light, comprising:

a light engine configured to project light to create images from a set of image representations;

a light sensor for sensing a signal from each of a plurality of spectral regions of ambient light to define a sensed signature of the ambient light; and

a controller in communication with the light sensor and the light engine, the controller having access to a predetermined signature and a predefined color adjustment for each of a plurality of different types of light sources, each predefined color adjustment being configured to reduce a change in color rendition introduced by a corresponding type of light source as ambient light, the controller being configured to compare the sensed signature to the predetermined signatures to identify a type of light source that corresponds to the ambient light, ~~thereby defining a~~ the controller also being configured to select ~~select~~ a predefined color adjustment corresponding to ~~based on~~ the type of light source identified, the controller further ~~also~~ being configured to modify each of the images created by the light engine with the predefined color adjustment for the type of light source identified as corresponding to the ambient light.

Funston does not teach or suggest every element of independent claim 14. For example, and for at least the same general reasons as those described above in relation to claim 1, Funston does not teach or suggest a predefined color adjustment configured to reduce a change in color rendition introduced by a corresponding type of light source as ambient light. Accordingly, claim 14 should be allowed. Claims 15-19, which depend from claim 14, also should be allowed for at least the same reasons as claim 14.

C. Claims 21-29

Claim 21, as amended, is directed to a program storage device:

21. (Currently Amended) A program storage device readable by a processor, tangibly embodying a program of instructions executable by the processor to perform methods steps for adjusting color of images displayed in ambient light, the method steps comprising:

providing a predetermined spectral signature and a predefined color adjustment for each of a plurality of different types of light sources, each predefined color adjustment being configured to reduce a change in color rendition introduced by a corresponding type of light source as ambient light;

sensing a signal from a plurality of spectral regions of ambient light to define a sensed signature of the ambient light;

comparing the sensed signature to each predetermined signature to identify a type of light source that corresponds to the ambient light, thereby selecting a color adjustment based on the type of light source identified; and

projecting light to create ~~creating~~ images modified by the selected color adjustment.

Funston does not teach or suggest every element of independent claim 21. For example, and for at least the same general reasons as those described above in relation to claim 1, Funston does not teach or suggest providing a predefined color

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adjustment configured to reduce a change in color rendition introduced by a corresponding type of light source as ambient light. Accordingly, claim 21 should be allowed. Claims 22-29, which depend from claim 21, also should be allowed for at least the same reasons as claim 21.

D. Claim 30

Claim 30, as amended, is directed to a system for adjusting color:

30. (Currently Amended) A system for adjusting color of images displayed in ambient light, comprising:

means for sensing a signal from a plurality of spectral regions of ambient light to define a sensed signature of the ambient light;

means for comparing the sensed signature to predetermined signatures of different types of light sources to identify a type of light source that corresponds to the ambient light; and

means for projecting light to create creating images modified by a predefined color adjustment for the type of light source identified, the predefined color adjustment being configured to reduce a change in color rendition introduced by the type of light source identified as corresponding to the ambient light.

Funston does not teach or suggest every element of independent claim 30. For example, and for at least the same general reasons as those described above in relation to claim 1, Funston does not teach or suggest means for projecting light to create images modified by a predefined color adjustment "configured to reduce a change in color rendition introduced by the type of light source identified as corresponding to the ambient light." Accordingly, claim 30 should be allowed.

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DEC 29 2006**IV. Other Patentable Distinctions**

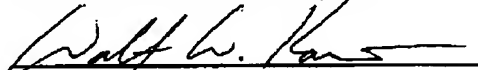
The dependent claims also include additional elements that patently distinguish the claimed invention from the art of record. For example, claims 8 and 27 recite sensing an intensity from each of only two spectral regions. Funston and the other art of record rely on white point measurements from three or more spectral regions. Accordingly, dependent claims 8 and 27 also should be allowed for this additional reason.

V. Conclusion

Applicant believes that this application is now in condition for allowance, in view of the above amendments and remarks. Accordingly, applicant respectfully requests that the Examiner issue a Notice of Allowability covering all of the pending claims. If the Examiner has any questions, or if a telephone interview would in any way advance prosecution of the application, please contact the undersigned attorney of record.

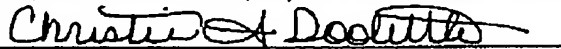
Respectfully submitted,

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CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this correspondence is being facsimile transmitted to Examiner D. Lewis, Group Art Unit 2629, Assistant Commissioner for Patents, at facsimile number (571) 273-8300 on December 29, 2006.


Christie A. Doolittle

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